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July 18, 2014

Jennifer LaPoma
U.S. Environmental Protection Agency, Region II
290 Broadway
New York, New York 10007-1866

Via Electronic Mail

Re: LPRSA RI/FS Model – Response to July 2, 2014 Letter- Lower Passaic River Study Area (LPRSA) Administrative Agreement and Order on Consent for Remedial Investigation/Feasibility Study (RI/FS) -CERCLA Docket No. 02-2007-2009

Dear Ms. LaPoma:

The Lower Passaic River Study Area Cooperating Parties Group (CPG) acknowledges receipt of USEPA Region 2's (Region 2) letter of July 2, 2014. In this letter and others, including its April 1 letter from Ray Basso and the April 9 email from Jennifer LaPoma, Region 2 has made several recent demands for the CPG to immediately provide its completed and revised modeling codes, input files and output files to Region 2.

Region 2 should understand, based on its own experience, that it takes significant effort and time to complete calibration and document the work of model development. It took more than 5 years for the Region's modeling team to complete a model that produced results that it believed were adequate to support the 8-mile Proposed Plan and FFS. While the Region has taken short-cuts for its 8-mile FFS model (i.e., BSAFs versus the Bioaccumulation Model) that are inconsistent with Modeling Work Plan that it approved for the LPRSA, the CPG has been required to follow the work plan. Therefore, consideration should be given to the fact that the CPG is subject to additional obligations in the modeling work plan.

As a result, and in response to the Region's request, the CPG proposes the following schedule to address EPA's directives with regard to LPRSA RI/FS Model submissions:

1. **Sediment Transport Modeling Code, Input Files and Example Output** - The CPG plans to provide revised sediment transport modeling code, input and output files to the Region upon conclusion of its remaining work; the CPG will deliver this code and associated files on July 31, 2014.
2. **Dioxin and PCB Bed Maps** – The CPG is completing its bed mapping by adding SSP 2 data. 2,3,7,8-TCDD and Tetra-PCBs bed maps will be complete in mid-August and will be submitted on August 22, 2014.
3. **Chemical Fate Transport (CFT) Code, Input files and Example Output** – The CPG will submit updated the CFT on September 19, 2014 following completion of integration with the Sediment Transport Model, refinements and calibration.

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4. **Carbon Simplification** – The carbon simplification will be provided with the CFT code.

Region 2 requested a response to the following matters in its April 9 comments:

1. **Exchange of Contaminants between the Water Column and Sediment Bed** – The CPG will provide its representation of exchange between the sediment bed and water column with its submission of the CFT code.
2. **Bathymetry, Bed Changes and Organic Carbon** - The CPG will address each of these items with the submission of the related model code.
3. **Contaminant Calibration passed forward to Bioaccumulation Model** – This will be provided with the CFT submission.
4. **Bioaccumulation Modeling** – The following are being addressed arising from the February 13, 2014 teleconference between Region 2 and the CPG:
 - Implementation of Non-Lipid Organic Carbon (NLOC)/Non-lipid Organic Material (NLOM) differentiation – NLOM was previously handled uniformly. The model is being updated to reflect differences between NLOC from sediment, particulate, and plant sources, and NLOM from biota.
 - Refinement of dissolved oxygen saturation % assumption – Model previously assumed a static dissolved oxygen saturation of 90%. Empirical dissolved oxygen data were reviewed and the model is being updated to reflect lower dissolved oxygen saturation in lower reaches of the river. This update will improve agreement between model output and empirical tissue concentrations.
 - Updates to food web prey fractions – The list of species modeled and their position in the food web is being revised to better reflect the conclusions of the BERA. This includes merging the small benthic omnivore and large benthic omnivore compartments into a new benthic carnivore/omnivore compartment.
 - Continued parameterization of model – Model parameterization is being updated to reflect: comments during the February 13, 2014 meeting, conclusions from the BERA, and to account for new variables introduced from other model updates.
 - Adjustments of input parameters – Through continued discussion with Anchor QEA, bioaccumulation inputs are being adjusted to reflect updates to the sediment transport and contaminant fate & transport models.
 - Model code revisions – Model code errors discovered by Kevin Farley are being corrected along with other minor revisions.

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If this proposed schedule for modeling is acceptable to the Region then the RI/FS schedule will be revised to reflect this.

Consistent with the approach that EPA has taken in the past (e.g., responding to a December 20, 2013 CPG modeling code request on March 12, 2014), the CPG does not think it is productive or helpful to provide modeling material that is known to be incomplete and not ready for the Region's review.

Finally, the Region notes CPG's refusal to participate in modeling meetings with representatives from Occidental Chemical Corporation. This position is well-founded in light of Tierra, Maxus, and Occidental's (TMO) withdrawal from the CPG. TMO is no longer participating in or funding the RI/FS, and similar to other parties who have withdrawn from the CPG, has no right to participate in the RI/FS. The CPG is not aware that the Region has required the attendance of other withdrawn parties. Additionally, as Region 2 is aware, TMO owes the CPG approximately \$2.5 million for surface water sampling conducted in the Newark Bay Study Area – an obligation they continue to fail to meet.

Please include this letter in the administrative record for the LPRSA RI/FS Operable Unit of the Diamond Alkali Superfund Site.

Please contact Bill Potter or me to discuss.

Very truly yours,

de maximis, inc.



Robert Law, Ph.D.
CPG Project Coordinator

cc: Ray Basso, USEPA
CPG Members
William Hyatt, CPG Coordinating Counsel
Willard Potter, *de maximis, inc.*